



FACULTY OF CLINICAL SCIENCES
COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS



13th Annual Scientific Conference & Gathering

THEME

**Environmental Virology,
Exposomics and Epigenetics**

VENUE

Old Great Hall, College of Medicine,
University of Lagos, Idi Araba,
Lagos State

DATE

WEDNESDAY 8TH JUNE 2016

TIME

8.00 am - 5.00pm

• PROGRAMME & BOOK OF ABSTRACTS •

COMPARATIVE STUDY OF ADMISSION BLOOD PRESSURE AND 30 DAY STROKE OUTCOME AT THE LAGOS UNIVERSITY TEACHING HOSPITAL

OKUBADEJO NU, OJO OO

Department of Medicine, Faculty of Clinical Sciences, College of Medicine, University of Lagos and Lagos University Teaching Hospital, Idi Araba, Lagos State

Correspondence: Ojo OO; Email: dlaraoyatoye@yahoo.com

Background: The relationship between admission blood pressures (BPs) and outcome following acute stroke is a continuing source of debate. The mechanisms underlying BP elevation post stroke vary by stroke mechanism. The impact of admission BP on stroke outcome is a basis for recommending treatment thresholds. This study aimed to compare admission BPs in acute ischaemic stroke (AIS) and intracerebral haemorrhage (ICH) and explore the relationship to short term case fatality.

Methodology: This descriptive study was based on data from our prospective Stroke Database at the Lagos University Teaching Hospital. First ever stroke cases admitted within 7 days of stroke over the preceding 48 month period up to May 2015 were included. Stroke subtype was diagnosed using clinical and brain CT criteria. Admission systolic (SBP), diastolic (DBP) and mean arterial BPs (MAP) were documented. The primary outcome measure was case fatality rate (CFR) at day 30 post stroke.

Results: 538 stroke cases were included (226 AIS and 312 ICH). The mean \pm standard deviation and median ages (years) were: AIS - 59.1 ± 12.9 , 60; ICH - 54.8 ± 11.9 , 54 ($p < 0.001$). The mean admission SBP, DBP and MAP (all in mmHg) in AIS and ICH were 175.3 ± 34.0 v. 184.1 ± 33.9 ($p = 0.003$), 106.2 ± 22.4 v. 109.7 ± 20.3 ($p = 0.06$) and 129.3 ± 24.7 v. 134.5 ± 23.2 ($p = 0.01$). CFR in stroke with MAP (mmHg) < 120 was 19% compared to MAP ≥ 120 - 33.2% (Odds ratio 2.12, 95%CI 1.33 – 3.36). There was a J-shaped relationship between MAP and CFR.

Conclusions: The study reiterates the important observations with respect to relationship of admission blood pressure and stroke case fatality, including the increased case fatality at both ends of the BP spectrum.

Keywords: Stroke, blood pressure, admission, outcome, 30 days